IN THE CLAIMS:

1-31. (Cancelled).

32. (New). A method for reducing neuronal degeneration caused by the neurodegenerative effects of disease, or for reducing secondary neuronal degeneration that follows the primary neuronal damage of an injury, in the central or peripheral nervous system of an individual in need thereof, comprising:

causing T cells activated by poly-Glu,Tyr to accumulate at the site of neuronal degeneration in the individual in need, thereby reducing neuronal degeneration at that site.

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33. (New). A method in accordance with claim 32, wherein the individual in need thereof is being treated post-operatively after tumor removal from or surgery on the CNS, whereby the secondary neuronal degeneration caused by glutamate toxicity, following the primary neuronal damage of the surgery, is reduced.

34. (New). A method in accordance with claim 32, wherein said individual in need is one whose neuronal degeneration or secondary neuronal degeneration is caused or exacerbated by glutamate toxicity.

35. (New). A method in accordance with claim 32, wherein the individual in need is one suffering from an injury that has caused primary neuronal damage.

36. (New) A method in accordance with claim 35, wherein said injury is selected from the group consisting of spinal cord injury, blunt trauma, penetrating trauma, hemorrhagic stroke, or ischemic stroke.

37. (New) A method in accordance with claim 32, wherein the individual in need is one suffering from a disease B4 that has neurodegenerative effects.

38. (New) A method in accordance with claim 37, wherein said disease is selected from the group consisting of diabetic neuropathy, senile dementia, Alzheimer's disease, Parkinson's Disease, facial nerve (Bell's) palsy, glaucoma, Huntington's chorea, amyotrophic lateral sclerosis, status epilepticus, non-arteritic optic neuropathy, and vitamin deficiency.

39. (New). A method in accordance with claim 32, wherein the individual in need is one suffering from epilepsy, amnesia, anxiety, hyperalgesia, psychosis, seizures, oxidative stress, or opiate tolerance and dependence.

40. (New). A method in accordance with claim 32, wherein said individual in need is one suffering from an injury or disease associated with abnormally elevated intraocular pressure.

41. (New). A method in accordance with claim 37, wherein said individual in need is suffering from an autoimmune disease.

42. (New). A method in accordance with claim 32, wherein said activated T cells are caused to accumulate at the site of neuronal degeneration by administering an effective amount of poly-Glu,Tyr in such a manner as to cause a T cell response thereto, such that T cells become activated by the poly-Glu,Tyr.

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43. (New). A method in accordance with claim 42, in which said poly-Glu,Tyr is administered in a manner which promotes active immunization of the individual so as to build up a critical T cell response.

44. (New). A method in accordance with claim 32, wherein said activated T cells are caused to accumulate at the site of neuronal degeneration by administering an effective amount of activated T cells that have been activated by poly-Glu,Tyr.

45. (New). A method in accordance with claim 44, wherein said poly-Glu,Tyr-specific activated T cells are autologous T cells, or allogeneic T cells from related donors, or HLA-matched or partially matched, semi-allogeneic or fully allogeneic donors.

46. (New). A method in accordance with claim 45, wherein said T cells are autologous T cells which have been stored or are derived from autologous CNS cells.

47. (New). A method in accordance with claim 45, wherein said T cells are semi-allogeneic T cells.

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48. (New). A method for ameliorating the effects of an injury or disease that causes neuronal degeneration of the central or peripheral nervous system of an individual in need thereof, comprising:

causing T cells activated by poly-Glu,Tyr to accumulate at the site of neuronal degeneration in the individual in need, thereby reducing neuronal degeneration at that site.

49. (New). A method in accordance with claim 48, wherein the individual in need thereof is being treated post-operatively after tumor removal from or surgery on the CNS, whereby the secondary neuronal degeneration caused by

glutamate toxicity, following the primary neuronal damage of the surgery, is reduced.

50. (New). A method in accordance with claim 48, wherein said individual in need is one whose neuronal degeneration or secondary neuronal degeneration is caused or exacerbated by glutamate toxicity.

51. (New). A method in accordance with claim 48, wherein the individual in need is one suffering from an injury that has caused primary neuronal damage.

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52. (New) A method in accordance with claim 51, wherein said injury is selected from the group consisting of spinal cord injury, blunt trauma, penetrating trauma, hemorrhagic stroke, or ischemic stroke.

53. (New) A method in accordance with claim 48, wherein the individual in need is one suffering from a disease that has neurodegenerative effects.

54. (New) A method in accordance with claim 53, wherein said disease is selected from the group consisting of diabetic neuropathy, senile dementia, Alzheimer's disease, Parkinson's Disease, facial nerve (Bell's) palsy, glaucoma, Huntington's chorea, amyotrophic lateral sclerosis, status

epilepticus, non-arteritic optic neuropathy, and vitamin deficiency.

55. (New). A method in accordance with claim 48, wherein the individual in need is one suffering from epilepsy, amnesia, anxiety, hyperalgesia, psychosis, seizures, oxidative stress, or opiate tolerance and dependence.

56. (New). A method in accordance with claim 48, wherein said individual in need is one suffering from an injury or disease associated with abnormally elevated intraocular pressure.

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57. (New). A method in accordance with claim 53, wherein said individual in need is suffering from an autoimmune disease.

58. (New). A method in accordance with claim 48, wherein said activated T cells are caused to accumulate at the site of neuronal degeneration by administering an effective amount of poly-Glu,Tyr in such a manner as to cause a T cell response thereto, such that T cells become activated by the poly-Glu,Tyr.

59. (New). A method in accordance with claim 58, in which said poly-Glu,Tyr is administered in a manner which

promotes active immunization of the individual so as to build up a critical T cell response.

60. (New). A method in accordance with claim 48, wherein said activated T cells are caused to accumulate at the site of neuronal degeneration by administering an effective amount of activated T cells that have been activated by poly-Glu,Tyr.

61. (New). A method in accordance with claim 60, wherein said poly-Glu,Tyr-specific activated T cells are autologous T cells, or allogeneic T cells from related donors, or HLA-matched or partially matched, semi-allogeneic or fully allogeneic donors.

62. (New). A method in accordance with claim 61, wherein said T cells are autologous T cells which have been stored or are derived from autologous CNS cells.

63. (New). A method in accordance with claim 61, wherein said T cells are semi-allogeneic T cells.